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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

6-3-02

In re Application of

Rakib, et. al.

Serial No.: 09/759,842

Filed: 01/12/2001

) Art Unit: 2664

) Examiner: unknown

) Docket No: TER-002.3P D5

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For: APPARATUS AND METHOD FOR TRELLIS ENCODING DATA FOR TRANSMISSION IN DIGITAL
DATA TRANSMISSION SYSTEMS

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§1.97-1.98, the undersigned would like to make the following prior art references of record in the above-identified patent application. The undersigned believes that some of these references may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. §1.56.

While this Information Disclosure Statement may contain material information pursuant to 37 C.F.R. §1.56, it is not intended to constitute an admission that any individual reference referred to herein is prior art to the invention disclosed and claimed in the above-identified patent application.

Each reference listed herein may be accompanied by an explanation of its relevance. While this explanation is believed to generally reflect the contents of the references which the undersigned believes a reasonable examiner might consider relevant and material to the examination of the above-identified patent application, it is not intended that the examiner rely on the description as unfailingly accurate or complete. A copy of each reference is enclosed for

the express purpose of providing the examiner with an opportunity to perform an independent evaluation to arrive at an independent assessment of its relevance and materiality, if any, to the claimed subject matter.

Cited Art

Betts, et. al., U.S. Patent 4,677,624, Filed March 1, 1985, Patent Issued June 30, 1987.

Ungerboeck, "Trellis-Coded Modulation with Redundant Signal Sets, Part II: State of the Art", *IEEE Communications Magazine*, Vol. 25, Number 2, pages 12-21, February 1987.

Pietrobon, et al., "Rotationally Invariant Nonlinear Trellis Codes for Two-Dimensional Modulation", *IEEE Transactions On Information Theory*, Vol. 40, No. 6, pages 1773-1791, November 1994.

Biglieri, et al., "Introduction to Trellis-Coded Modulation with Applications", 1991, MacMillan, New York.


Respectfully submitted,

Dated: May 1, 2002



Ronald Craig Fish
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I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington D.C. 20231 on May 1, 2002
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Ronald Craig Fish, President
Ronald Craig Fish a Law Corporation
Reg. No. 28,843



SHEET 1 OF 1

FORM PTO-1449
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
TER-002.3P D5SERIAL NO.
09/759,842INFORMATION DISCLOSURE
STATEMENT BY APPLICANTAPPLICANT
Rakib, et. al.

(USE SEVERAL SHEETS IF NECESSARY)

FILING DATE
01/12/2001GROUP
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U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROP. |
|---------------------|-----------------|---------------|---------------|-------|--------------|---------------------------|
| A | 4,677,624 | Jun. 30, 1987 | Betts, et al. | 371 | 43 | Mar. 1, 1985 |
| B | | | | | | |
| C | | | | | | |
| D | | | | | | |
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FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL | DOCUMENT NUMBER | PUB. DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION |
|---------------------|-----------------|-----------|---------|-------|----------|-------------|
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| R | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| EXAMINER INITIAL | |
|---------------------|---|
| S | Ungerboeck: "Trellis-Coded Modulation with Redundant Signal Sets. Part II: State of the Art" <i>IEEE Communications Magazine</i> , Vol. 25, No. 2, February 1987, pgs. 12-21. |
| T | Pietrobon et. al. "Rotationally Invariant Nonlinear Trellis Codes for Two-Dimensional Modulation" <i>IEEE Transactions on Information Theory</i> , Vol. 40, No. 6, November 1994, pgs. 1773-1791. |
| U | Biglieri et al. "Introduction to Trellis-Coded Modulation with Applications" 1991, MacMillan, New York. |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.